

UTAH BLACK BEAR HARVEST REPORT

2001 through 2005



Publication No. 05-38

Utah Black Bear Harvest Report 2001 through 2005

Prepared by:

Heather Hill
Wildlife Biologist

and

Kevin Bunnell
Mammals Program Coordinator

Publication No. 05-38

Annual Performance Report for Federal Aid Project W-65-M-50, 51, 52, and 53

State of Utah
Department of Natural Resources
DIVISION OF WILDLIFE RESOURCES

John Kimball
Director, 2001

Kevin Conway
Director, 2002-2004

Miles Moretti
Acting Director, 2004-2005

James F. Karpowitz
Director, 2005

TABLE OF CONTENTS

List of Figures	i
List of Tables	i
Introduction	1
Methods	1
Results	2
Sport Harvest	3
Pursuit	10
Survival	17
Method of Take	17
Age and Sex Ratio	18
Livestock Depredation	19
Appendix A: Statewide Black Bear Harvest Summary	20
Appendix B: Black Bear Harvest Summary by Hunt Unit	22

LIST OF TABLES

Table 1. Season dates and management units for black bear harvest and pursuit, 2001 through 2005.....	1
Table 2. Black bear harvest in Utah, 1967 through 2005	3
Table 3. Black bear harvest by management unit, spring and fall, 2001	5
Table 4. Black bear harvest by management unit, spring and fall, 2002	6
Table 5. Black bear harvest by management unit, spring and fall, 2003	7
Table 6. Black bear harvest by management unit, spring and fall, 2004	8
Table 7. Black bear harvest by management unit, spring and fall, 2005	9
Table 8. Statewide black bear pursuit statistics, fall 2001 and spring 2002.....	10
Table 9. Statewide black bear pursuit statistics, fall 2002 and spring 2003.....	11
Table 10. Statewide black bear pursuit statistics, fall 2003	12
Table 11. Statewide black bear pursuit statistics, spring 2004.....	13
Table 12. Statewide black bear pursuit statistics, fall 2004	14
Table 13. Statewide black bear pursuit statistics, spring 2005	15
Table 14. Statewide black bear pursuit statis tics, fall 2005	16
Table 15. Adult black bear survival estimated with Chapman-Robson estimator, 1997 through 2005	17
Table 16. Black bear harvest by method of take, 2001 through 2005.....	17

LIST OF FIGURES

Figure 1. Black bear harvest in Utah, 1967 through 2005	4
Figure 2. Black bears per hunter and total bear mortality in Utah, 1967 through 2005.....	4
Figure 3. Age structure of black bear sport harvest in Utah, 2001 through 2005	18
Figure 4. Sex ratio of black bear sport harvest in Utah, 1975 through 2005	18
Figure 5. Number of livestock depredation incidents and bears taken by Wildlife Services, 1992 through 2005....	19
Figure 6. Livestock losses due to black bear depredation, 1992 through 2005	19

INTRODUCTION

The black bear harvest report presents black bear harvest and hunter effort trends across the state of Utah, based on data collected from bear hunters and compiled by the Utah Division of Wildlife Resources (Division). This report represents the black bear portion of Federal Aid Project W-65-M, segments 50, 51, 52, and 53, grant agreement periods October 1, 2001 through December 31, 2002, January 1, 2003 through September 30, 2003, October 1, 2003 through September 30, 2004, and October 1, 2004 through September 30, 2005, respectively. This Federal Aid project covers hunting seasons 2001, 2002, 2003, 2004, and 2005, and reports statewide trends since the 1960s. In addition, this report presents black bear population trend indicators.

For purposes of effective management, the state of Utah is divided into 30 wildlife management units, which are the same for all hunted species. Some of these units were combined into larger units in order to provide hunters more opportunity, and a few units were open to pursuit only (Table 1). Hunt units were managed through a limited entry permit system, where a hunter had to apply for and draw from a pool of limited permits. The hunter was allowed to hunt the entire season, or until the permit was filled. Applicants who drew a limited entry permit were required to wait two years before applying for another permit. The season limit was one bear, and females with cubs, or cubs, were not legal to harvest. An unlimited number of pursuit only permits, valid on any open unit statewide, were also available.

Table 1. Season dates and management units for black bear harvest and pursuit, 2001 through 2005.

Season	# of Open Hunt Units	Pursuit Only Units	Spring Hunt Season Dates	Fall Hunt Season Dates	Spring Pursuit Season Dates	Fall Pursuit Season Dates
2001	19	5, 24, 27	4/14 to 5/21	8/25 to 9/30 and 11/1 to 11/29	4/14 to 6/6	8/25 to 9/30 and 11/1 to 11/29
2002	20	5, 24, 27	4/13 to 5/27	8/24 to 9/29 and 11/1 to 11/28	4/13 to 6/5	8/24 to 9/29 and 11/1 to 11/28
2003	21	2, 5, 24, 27	4/12 to 5/16	8/23 to 9/28 and 11/1 to 11/27	4/12 to 6/4	8/23 to 9/28 and 11/1 to 11/27
2004	20	24	4/10 to 5/24	8/28 to 10/2 and 11/1 to 11/27	4/10 to 6/2	8/28 to 10/2 and 11/1 to 11/27
2005	20	24	4/9 to 5/23	8/27 to 10/1 and 11/1 to 11/26	4/9 to 6/1	8/27 to 10/1 and 11/1 to 11/26

METHODS

All successful hunters were required to have their bear checked by a Division office or officer within 48 hours of harvest. At that time, tooth and tissue samples were collected, and a permanent tag affixed. Bear harvest information was also collected at that time. Teeth were sectioned and cementum annuli counted by Matson's Lab in Milltown, Montana, to estimate age of harvested bear. Survival rates were estimated using the Chapman-Robson estimator.

In past years, a black bear harvest mail questionnaire was sent each fall to all bear permit holders. This questionnaire was used to obtain hunter effort information from those who did not harvest a bear. Beginning with the 2001 bear season, this questionnaire was discontinued. Since then, total hunters afield was estimated at 90% of total license sales, based on past years' trends. All hunter effort information (hunter-days afield, hunter-days per hunter, and hunter-days per bear) for the past four years was collected when harvested bears were checked and tagged by the Division, and a projection factor was calculated by dividing total hunters afield by the total hunters who checked in a bear. This projection factor was used to determine hunter-days afield for all hunters, assuming that the average amount of time spent afield by successful hunters was similar to the time spent afield by non-successful hunters. The bear pursuit mail questionnaire was sent twice a year (spring and fall) to all bear pursuit permit holders. For the 2005 fall pursuit season, a telephone survey replaced the mail questionnaire for determining bear pursuit trends.

Harvest data from depredating bears, or bears involved in human safety incidents, were taken from damage reports received from USDA -APHIS Wildlife Services and from bears taken by Division personnel. Livestock operators could kill damaging bear and were required to have the carcass checked by a Division officer within 48 hours. Harvest information was collected at that time.

RESULTS

For the 2001 bear hunt, 214 limited entry permits were issued, and hunters harvested 68 bears, for a success rate of 32% (Table 2). Hunter success rate for the 2001 spring season was 25%, and success rate for the 2001 fall season was 36% (Table 3). In 2002, 232 limited entry bear permits were issued, and hunters harvested 84 bears, for a success rate of 36% (Table 2). Hunter success rate for the 2002 spring season was 43%, and success rate for the 2002 fall season was 36% (Table 4). For the 2003 bear hunt, 226 limited entry permits were issued, and hunters harvested 85 bears, for a success rate of 38% (Table 2). Hunter success rate for the 2003 spring season was 46%, and success rate for the 2003 fall season was 33% (Table 5). In 2004, 240 limited entry permits were issued, and hunters harvested 107 bears, for a success rate of 45% (Table 2). Hunter success rate for the 2004 spring season was 46%, and success rate for the 2004 fall season was 44% (Table 6). For the 2005 bear hunt, 252 limited entry permits were issued, and hunters harvested 79 bears, for a success rate of 31% (Table 2). Hunter success rate for the 2005 spring season was 20%, and success rate for the 2005 fall season was 37% (Table 7).

Sport Harvest

Table 2. Black bear harvest in Utah, 1967 through 2005.

Year	Permits Sold	Hunters Afield	Sport Harvest	Percent Permits Filled	Bear per Hunter	Percent Females	Depredation and Other Mortality	Total Harvest + Mortality	Pursuit Permits
1967			15				12	27	
1968			12				9	21	
1969	43	31	25	58.1%	0.81		27	52	
1970	155	119	9	5.8%	0.08		18	27	
1971	59	48	17	28.8%	0.35		16	33	
1972	96	77	19	19.8%	0.25		7	26	
1973	125	114	25	20.0%	0.22		0	25	
1974	134	117	29	21.6%	0.25		9	38	
1975	161	144	22	13.7%	0.15	41%	2	24	161
1976	107	96	10	9.3%	0.10	42%	7	17	48
1977	149	127	26	17.4%	0.20	33%	6	32	77
1978	222	185	40	18.0%	0.22	33%	10	50	114
1979	240	196	26	10.8%	0.13	19%	5	31	91
1980	217	177	26	12.0%	0.15	28%	6	32	95
1981	263	227	39	14.8%	0.17	30%	4	43	95
1982	229	188	38	16.6%	0.20	39%	6	44	93
1983	219	176	18	8.2%	0.10	44%	9	27	98
1984	217	184	26	12.0%	0.14	31%	6	32	33
1985	269	230	29	10.8%	0.13	27%	10	39	86
1986	332	302	72	21.7%	0.24	45%	6	78	90
1987	326	262	44	13.5%	0.17	35%	25	69	156
1988	491	394	69	14.1%	0.18	35%	28	97	173
1989	687	556	97	14.1%	0.17	30%	10	107	187
1990	142	119	22	15.5%	0.18	18%	16	38	355
1991	142	119	35	24.6%	0.29	23%	15	50	364
1992	142	124	32	22.5%	0.26	19%	25	57	524
1993	162	136	35	21.6%	0.26	51%	12	47	570
1994	168	153	42	25.0%	0.27	40%	20	62	552
1995	175	156	53	30.3%	0.34	34%	34	87	627
1996	181	174	68	37.6%	0.39	43%	35	103	630
1997	192	176	50	26.0%	0.28	44%	31	81	638
1998	202	181	46	22.8%	0.25	42%	42	88	635
1999*	220	199	57	25.9%	0.29	30%	35	92	264
2000	214	194	75	35.0%	0.39	35%	72	147	285
2001**	214	193	68	31.8%	0.35	37%	60	128	340
2002**	232	209	84	36.2%	0.40	32%	76	160	359
2003**	226	203	85	37.6%	0.42	29%	29	114	378
2004**	240	216	107	44.6%	0.50	21%	50	157	373
2005**	252	227	79	31.3%	0.35	23%	33	112	414
Total	7,845	6,729	1,671				823	2,494	8,905
Average	212.0	181.9	42.8	22.4%	0.26	33%	21.1	63.9	287.3

*Beginning in 1999, a bear only pursuit permit was issued. Previously, it was a cougar/bear pursuit permit.

**Includes conservation permits.

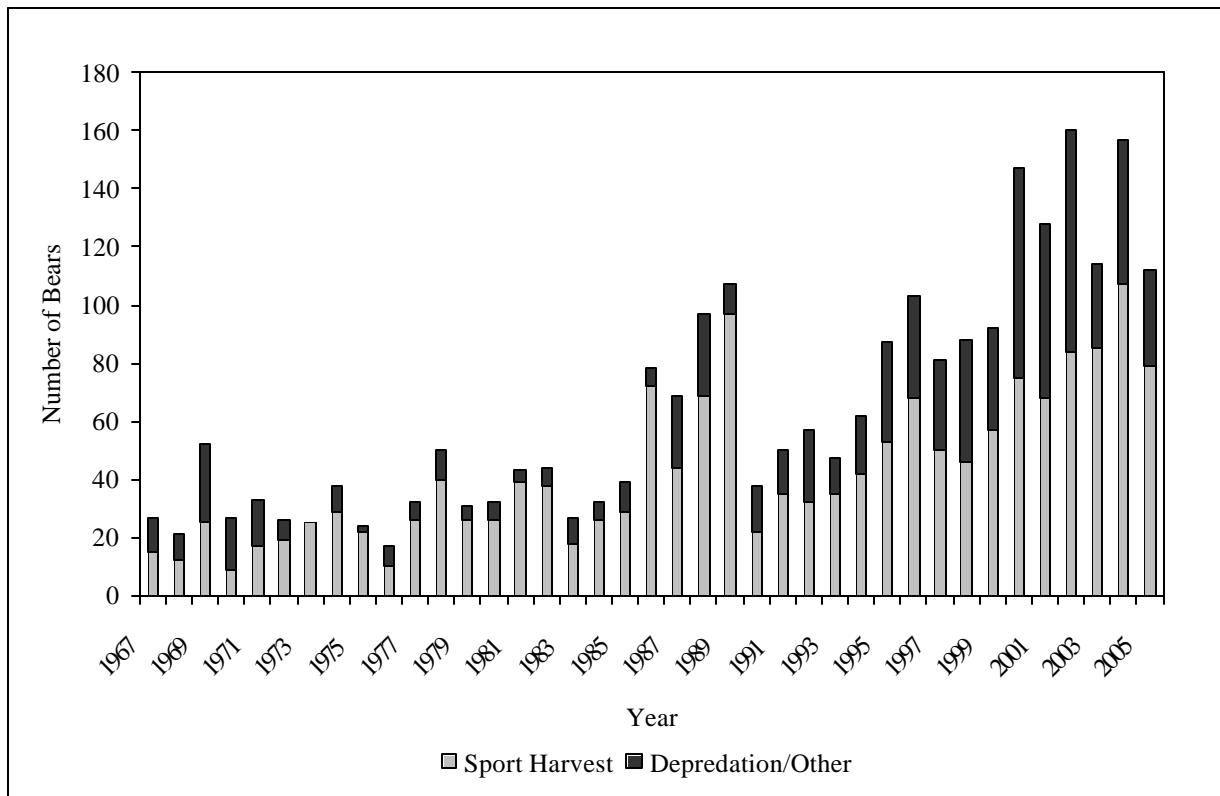


Figure 1. Black bear harvest in Utah, 1967 through 2005.

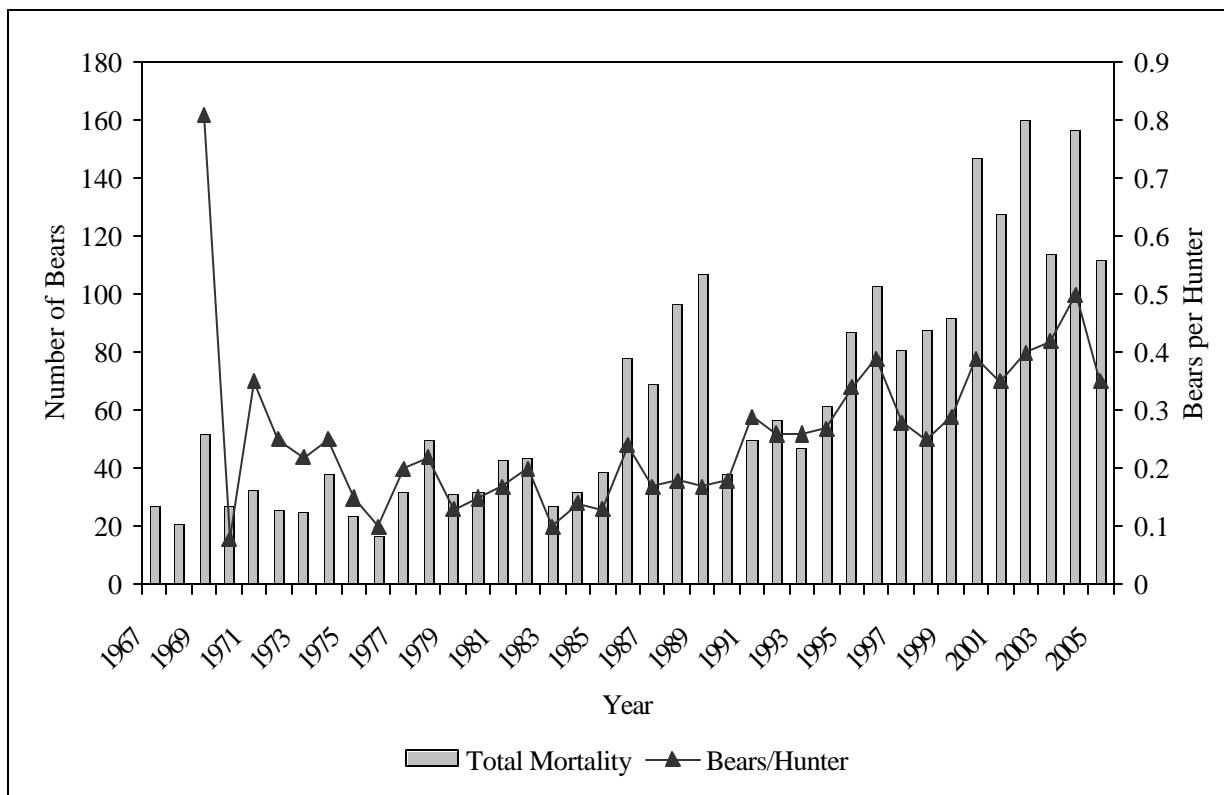


Figure 2. Black bears per hunter and total bear mortality in Utah, 1967 through 2005. Is this survey data?

Table 3. Black Bear harvest by unit in Utah, Spring and Fall, 2001.

Unit	Permits Issued	Sport Harvest						Depredation/Other Mortality*						Total				
		Adult			Sub-adult			Permits Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females											
Spring Hunt																		
11a/b	15	3	0	0	0	0	3	20%	0%	8.3	1	0	0	1	4	0%	7.8	
13a/b	30	13	3	0	0	0	16	53%	19%	8.1	2	0	0	2	18	17%	7.4	
17a	20	1	0	0	0	0	1	5%	0%	12.0	3	2	0	5	6	33%	5.7	
17b/c	14	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
Total	79	17	3	0	0	0	20	25%	15%	8.3	6	2	0	8	28	18%	7.2	
Fall Hunt																		
2/3/4	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
6/7/8a	2	0	0	0	0	0	0	0%	0%	6	7	0	0	13	13	54%	3.6	
8b	4	0	0	0	0	0	0	0%	0%	1	0	0	0	1	1	0%	0	
9	14	2	2	0	0	0	4	29%	50%	2.6	6	5	1	12	16	44%	5.4	
10	15	4	3	1	0	0	8	53%	38%	6.8	1	0	0	1	9	33%	6.8	
14	30	12	7	0	0	1	20	67%	35%	7.3	4	3	0	7	27	37%	7.6	
16a	6	0	1	0	0	1	2	33%	50%	2.5	0	0	0	0	2	50%	2.5	
16b	22	1	4	0	1	0	6	27%	83%	3.5	5	0	0	5	11	45%	2.9	
16c	18	2	1	0	0	0	3	17%	33%	5.0	6	2	0	8	11	27%	5.2	
22	1	1	0	0	0	0	1	100%	0%	5.0	0	0	0	0	1	0%	5.0	
23	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
25a/b	4	0	0	0	0	0	0	0%	0%	1	1	0	2	2	2	50%	2	
25c	8	1	2	0	0	0	3	38%	67%	7.6	1	0	1	2	5	40%	7.6	
26	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
28/29	6	0	1	0	0	0	1	17%	100%	19.0	0	1	0	1	2	100%	19.0	
Total	133	23	21	1	1	2	48	36%	46%	6.3	31	19	2	52	100	41%	5.9	
Statewide																		
Total **	214	40	24	1	1	2	68	32%	37%	6.9	37	21	2	60	128	36%	6.2	

*Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality.

**Statewide total permits issued includes conservation permits.

Table 4. Black Bear harvest by unit in Utah, Spring and Fall, 2002.

Unit	Permits Issued	Sport Harvest						Depredation/Other Mortality*						Total			
		Adult		Sub-adult		Total Harvest	Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	
		Males	Females	Males	Females												
Spring Hunt																	
11a/b	20	7	0	0	0	7	35%	0%	5.0	2	3	0	5	12	25%	5.0	
13a/b	30	17	4	0	0	21	70%	19%	6.9	3	0	0	3	24	17%	7.0	
17a	20	4	2	0	0	6	30%	33%	8.2	7	9	2	18	24	46%	6.5	
17b/c	14	2	0	0	0	2	14%	0%	3.0	3	6	2	11	13	46%	6.6	
Total	84	30	6	0	0	36	43%	17%	6.5	15	18	4	37	73	33%	6.5	
Fall Hunt																	
2/3/4	1	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
6/7/8/a	2	0	0	0	0	0	0%	0%	0	6	1	0	7	7	14%	2.0	
8b	4	0	0	0	0	0	0%	0%	0	2	2	0	4	4	50%	3.0	
9a	6	1	1	0	0	1	3	50%	33%	6.7	0	0	0	3	33%	6.7	
9b/c/d	10	0	2	0	0	1	3	30%	67%	2.7	2	1	0	3	6	50%	2.5
10	25	7	5	0	0	0	12	48%	42%	7.3	1	0	1	2	14	36%	7.3
14	30	10	5	0	0	0	15	50%	33%	8.1	3	0	0	3	18	28%	8.1
16a	6	1	1	0	0	0	3	50%	33%	6.0	1	0	1	2	5	20%	7.5
16b	16	1	2	0	1	1	5	31%	60%	10.0	1	1	2	4	9	44%	10.0
16c	12	1	0	0	0	0	1	8%	0%	3.0	2	2	0	4	5	40%	3.0
22	1	0	0	0	0	0	0%	0%	0	1	2	0	3	3	67%		
23	1	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
25a/b	4	0	1	0	0	0	1	25%	100%	2.0	0	0	0	1	100%	2.0	
25c	8	2	1	0	1	0	4	50%	50%	3.0	1	0	0	1	5	40%	3.0
26	1	0	0	0	0	0	0%	0%	0	1	0	0	1	1	0%		
28/29	6	0	1	0	0	0	1	17%	100%	11.0	4	0	0	4	5	20%	11.0
Total	133	23	19	1	2	3	48	36%	44%	7.0	25	9	4	38	86	35%	6.7
Statewide																	
Total**	232	53	25	1	2	3	84	36%	32%	6.8	41	27	8	76	160	34%	6.6

*Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality.

**Statewide total permits issued includes conservation permits.

***Statewide total for Depredation/Other mortality includes 1 male mortality from unit 24.

Table 5. Black Bear harvest by unit in Utah, Spring and Fall, 2003.

Unit	Permits Issued ^{**}	Sport Harvest						Depredation/Other Mortality*						Total				
		Adult			Sub-adult			Total Permits Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Unknown	Harvest											
Spring Hunt																		
11a/b	20	7	2	0	0	0	9	45%	22%	12.0	0	0	0	0	9	22%	12.0	
13a/b	30	13	3	0	2	0	18	60%	28%	9.0	1	0	0	1	19	26%	9.0	
17a	20	4	2	0	3	1	10	50%	50%	4	0	0	4	4	14	36%	5.5	
17b/c	14	2	0	0	0	0	2	14%	0%	4	2	0	0	6	8	25%	5.2	
Total	84	26	7	0	5	1	39	46%	31%	10.0	9	2	0	11	50	28%	7.1	
Fall Hunt																		
34	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
6/7/8a	2	0	0	0	0	0	0	0%	0%	0	2	1	0	3	3	33%	7.3	
8b	4	1	0	0	0	0	1	25%	0%	7.0	0	0	0	0	1	0%	7.0	
9a	7	0	2	0	0	0	2	29%	100%	11.0	0	0	0	0	2	100%	11.0	
9b/c/d	9	2	2	0	0	0	4	44%	50%	7.3	0	1	1	2	6	50%	8.2	
10	25	3	3	1	0	2	9	36%	33%	8.0	2	0	1	3	12	25%	8.3	
14	30	10	3	0	0	0	13	43%	23%	7.4	0	0	0	0	13	23%	7.4	
16a	8	3	0	0	0	0	3	38%	0%	3.0	1	0	0	1	4	0%	3.0	
16b	16	0	1	0	0	0	1	6%	100%	5.0	2	0	0	2	3	33%	4.5	
16c	12	3	0	0	0	0	3	25%	0%	7.3	0	1	1	2	5	20%	6.0	
22	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
23	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
25a/b	4	3	0	0	0	0	3	75%	0%	5.3	1	0	0	1	4	0%	4.5	
25c	8	3	0	0	0	0	3	38%	0%	5.0	1	3	0	4	7	43%	5.5	
26	1	0	1	0	0	0	1	100%	100%	13.0	0	0	0	0	1	100%	13.0	
27	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
28/29	11	2	1	0	0	0	3	27%	33%	5.3	0	0	0	0	3	33%	5.3	
Total	141	30	13	1	0	2	46	33%	28%	7.1	9	6	3	18	64	30%	6.9	
Statewide																		
Total	226	56	20	1	5	3	85	38%	29%	7.4	18	8	3	29	114	29%	6.9	

*Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality.

**Permits issued includes eleven unit-specific conservation permits and one statewide conservation permit.

Table 6. Black Bear harvest by unit in Utah, Spring and Fall, 2004.

Unit	Permits Issued ^{**}	Sport Harvest						Depredation/Other Mortality*						Total					
		Adult			Sub-adult			Total Permits Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality			
		Males	Females	Males	Females	Males	Females												
Spring Hunt																			
11a/b	20	9	2	0	0	0	0	11	55%	18%	7.6	4	4	0	8	19	32%	8.7	
13a/b	30	12	3	0	0	0	0	15	50%	20%	7.9	0	1	0	1	16	25%	7.9	
17a	20	5	0	0	0	0	0	5	25%	0%	5.0	2	2	0	4	9	22%	4.1	
17b/c	14	6	2	0	0	0	0	8	57%	25%	2.6	3	2	0	5	13	31%	2.5	
Total	84	32	7	0	0	0	0	39	46%	18%	6.3	9	9	0	18	57	28%	6.3	
Fall Hunt																			
2/3/4/5	1	0	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
6/7/8/a	5	1	0	0	0	0	0	1	20%	0%	2.0	0	2	0	0	2	3	67%	3.0
8b	4	0	0	0	0	0	0	0	0%	0%	0	1	0	0	1	1	0%	2.0	
9a	6	2	2	0	0	0	0	4	67%	50%	11.8	1	1	0	2	6	50%	11.8	
9b/c/d	10	2	2	2	0	0	0	6	60%	33%	3.3	0	1	0	1	7	43%	3.3	
10	25	10	3	0	0	0	0	13	52%	23%	5.9	2	2	0	4	17	29%	5.9	
14	30	18	1	0	0	0	0	19	63%	5%	8.4	0	0	0	0	19	5%	8.4	
16a	8	2	1	0	0	0	0	3	38%	33%	3.5	1	0	0	1	4	25%	5.3	
16b	16	4	1	0	0	0	0	5	31%	20%	3.0	6	1	0	7	12	17%	3.7	
16c	12	2	1	1	0	0	0	4	33%	25%	3.0	3	2	0	5	9	33%	5.2	
22	1	1	0	0	0	0	1	100%	0%	7.0	0	0	0	0	1	0%	7.0		
23	1	0	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
25a/b	6	0	2	0	0	0	0	2	33%	100%	11.5	0	0	0	0	2	100%	11.5	
25c/26	17	6	2	0	0	0	0	8	47%	25%	8.3	2	0	1	3	11	18%	8.4	
27	1	0	0	0	0	0	0	0	0%	0%	0	1	0	1	1	1	100%	4.0	
28/29	12	2	0	0	0	0	0	2	17%	0%	8.0	2	0	0	2	4	0%	4.0	
Total	155	50	15	3	0	0	0	68	44%	22%	6.9	20	11	1	29	97	27%	6.5	
Statewide																			
Total	240	82	22	3	0	0	0	107	45%	21%	6.6	29	20	1	50	157	27%	6.4	

*Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality.

**Permits issued includes thirteen unit-specific conservation permits and one statewide conservation permit.

***Statewide total for Depredation/Other mortality includes 2 male and 1 female harvest from unit 16, subunit unknown.

Table 7. Black Bear harvest by unit in Utah, Spring and Fall, 2005.

Unit	Permits Issued**	Sport Harvest						Depredation/Other Mortality*						Total			
		Adult		Sub-adult		Total Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	
		Males	Females	Males	Females												
Spring Hunt																	
11a/b	20	2	0	0	0	2	10%	0%	6.5	0	0	0	0	2	0%	6.5	
13a/b	30	8	2	0	0	10	33%	20%	7.1	0	3	0	3	13	38%	6.5	
17a	19	3	1	0	0	4	21%	25%	5.3	5	2	0	7	11	27%	5.3	
17b/c	14	1	0	0	0	1	7%	0%	2.0	1	1	0	2	3	33%	2.0	
Total	83	14	3	0	0	17	20%	18%	6.3	6	6	0	12	29	31%	5.9	
Fall Hunt																	
2/3/4/5	1	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
6/7/8/a	5	2	1	0	0	3	60%	33%	3.0	2	1	2	5	8	25%	4.7	
8b	4	1	1	0	0	2	50%	50%	12.0	0	0	0	0	2	50%	12.0	
9a	12	4	1	0	0	5	42%	20%	4.8	0	1	0	1	6	33%	6.0	
9b/c/d	12	6	1	0	0	7	58%	14%	7.4	0	0	0	0	7	14%	7.4	
10	30	5	2	0	1	8	27%	38%	6.5	0	0	0	0	8	38%	6.5	
14	30	8	5	0	0	13	43%	38%	9.6	1	2	0	3	16	44%	9.6	
16a	8	5	0	0	0	5	63%	0%	2.0	0	1	0	1	6	17%	2.0	
16b	16	7	0	0	0	7	44%	0%	4.5	1	0	2	9	11%	4.5		
16c	11	4	0	0	0	4	36%	0%	2.7	1	1	0	2	6	17%	3.5	
22	1	0	1	0	0	1	100%	100%	13.0	0	0	0	0	1	100%	13.0	
23	1	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0	
25a/b	6	2	0	0	0	2	33%	0%	6.0	1	0	0	1	3	0%	6.0	
25c/26	17	2	2	0	0	4	24%	50%	13.0	1	1	1	3	7	43%	9.3	
27	2	1	0	0	0	1	50%	0%	0	0	0	0	0	1	0%	0	
28/29	12	0	0	0	0	0	0%	0%	2	1	0	3	3	3	33%	4.3	
Total	168	47	14	0	1	62	37%	24%	6.8	9	9	3	21	83	29%	6.5	
Statewide																	
Total	252	61	17	0	1	0	79	31%	23%	6.6	15	15	3	33	112	29%	6.4

*Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality. This mortality is summarized by unit and is not divided by spring/fall season.

**Permits issued includes thirteen unit-specific conservation permits and one statewide conservation permit.

Pursuit

Table 8. Statewide black bear pursuit statistics, fall 2001 and spring 2002.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield	Number of Bears Treed				Bears Treed per Pursuit-day
				Males	Females	Cubs	Unknown	
2/3/4	1	4	11	0	0	0	0	0.00
6/7/8a	2	7	65	7	14	14	0	0.54
8b	3	11	170	94	22	47	22	1.09
9a	3	11	76	14	11	18	4	0.62
9b/9c/9d	9	33	206	33	36	14	22	0.51
10	32	116	1,323	340	199	18	126	0.52
11a/11b	7	25	325	72	22	7	7	0.33
13a/13b	32	116	1,135	235	177	87	184	0.60
14	14	51	455	61	51	14	7	0.29
16a	2	7	40	0	0	0	7	0.18
16b	3	11	69	0	0	0	0	0.00
16c	7	25	130	18	18	11	4	0.39
17a	7	25	90	4	0	0	4	0.09
17b/17c	7	25	213	7	0	0	43	0.23
22	2	7	36	4	0	0	0	0.11
24	1	4	36	4	0	0	0	0.11
25a/25b	4	14	76	0	0	0	0	0.00
25c	10	36	300	40	47	18	4	0.36
26	6	22	220	47	47	43	14	0.69
28/29	6	22	177	4	7	0	4	0.08
Total*	88	318	5,142	984	651	291	452	0.46

*Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

107 survey responses; 318 permits sold; projection factor 3.614

19 (18%) permit holders did not pursue

Table 9. Statewide black bear pursuit statistics, fall 2002 and spring 2003.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield	Number of Bears Treed					Bears Treed per Pursuit-day
				Males	Females	Cubs	Unknown	Total	
2/3/4	1	3	45	0	0	0	0	0	0.00
5	0	0	--	--	--	--	--	--	--
6/7/8a	1	3	13	0	0	0	0	0	0.00
8b	4	13	122	35	22	16	10	83	0.68
9a	2	6	48	19	10	0	0	29	0.60
9b/9c/9d	6	19	147	29	42	22	0	93	0.63
10	30	96	1197	285	250	80	26	641	0.54
11a/11b	7	22	307	35	19	0	48	102	0.33
13a/13b	32	102	1296	381	339	90	22	832	0.64
14	18	58	381	77	42	6	19	144	0.38
16a	4	13	48	10	0	0	6	16	0.33
16b	7	22	205	35	45	26	13	119	0.58
16c	6	19	138	3	19	6	6	34	0.25
17a	7	22	170	10	13	13	3	39	0.23
17b/17c	7	22	189	13	10	0	35	58	0.31
22	1	3	32	3	0	0	0	3	0.09
23	0	0	--	--	--	--	--	--	--
24	0	0	--	--	--	--	--	--	--
25a/25b	3	10	32	0	3	0	0	3	0.09
25c	11	35	336	61	58	26	16	161	0.48
26	6	19	218	51	70	6	16	143	0.66
27	1	3	26	3	0	6	0	9	0.35
28/29	7	22	192	6	6	0	6	18	0.09
Total*	91	291	5,142	1,056	948	297	226	2,527	0.49

*Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

110 survey responses; 357 permits sold; projection factor 3.2

19 (17%) permit holders did not pursue; 45 (49%) pursued in more than one unit

66 (73%) pursued 8/24/02 through 9/29/02; 27 (30%) pursued 11/1/02 through 11/28/02; 72 (79%) pursued 4/12/03 through 6/4/03

Table 10. Statewide black bear pursuit statistics, fall 2003.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield	Number of Bears Treed				Bears Treed per Pursuit-day
				Males	Females	Cubs	Unknown	
2	0	0	--	--	--	--	--	--
3/4	2	7	49	0	0	0	0	0.00
5	0	0	--	--	--	--	--	--
6/7/8a	1	4	11	4	0	0	4	0.73
8b	2	7	21	4	4	0	0	0.38
9a	2	7	11	0	0	0	4	0.36
9b/9c/9d	11	39	291	63	63	18	39	0.63
10	16	56	455	123	112	46	18	0.66
11a/11b	4	14	77	7	7	0	7	0.27
13a/13b	13	46	564	193	207	137	28	1.00
14	7	25	235	56	35	18	0	0.46
16a	3	11	60	11	0	0	0	0.18
16b	7	25	105	4	4	7	0	0.14
16c	1	4	53	4	4	0	0	0.15
17a	10	35	214	18	25	18	0	0.29
17b/17c	6	21	70	4	0	0	4	0.11
22	0	0	--	--	--	--	--	--
23	0	0	--	--	--	--	--	--
24	0	0	--	--	--	--	--	--
25a/25b	0	0	--	--	--	--	--	--
25c	10	35	231	25	7	0	11	0.19
26	3	11	74	18	32	7	0	0.77
27	1	4	4	0	0	0	0	0.00
28/29	7	25	207	11	4	0	0	0.07
Total*	65	228	2,732	545	504	251	115	0.52

*Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

108 survey responses; 378 permits sold; projection factor 3.5

43 (40%) permit holders did not pursue; 29 (45%) pursued in more than one unit

28 (43%) pursued 8/23 to 9/28 and 11/1 to 11/27; 34 (52%) pursued only 8/23 to 9/28

Table 11. Statewide black bear pursuit statistics, spring 2004.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield	Number of Bears Treed				Bears Treed per Pursuit-day	
				Males	Females	Cubs	Unknown		
2/3/4/5	3	13	68	13	4	0	4	21	0.31
6/7/8a	3	13	59	17	13	8	8	47	0.79
8b	4	17	59	25	21	17	8	72	1.21
9a	4	17	47	4	0	0	0	4	0.09
9b/9c/9d	14	59	428	76	21	13	4	114	0.27
10	10	42	471	119	68	30	25	242	0.51
11a/11b	8	34	276	59	17	0	0	76	0.28
13a/13b	15	64	750	216	191	85	25	517	0.69
14	5	21	153	64	17	0	0	81	0.53
16a	4	17	144	13	4	8	13	38	0.26
16b	3	13	76	0	0	0	0	0	0.00
16c	4	17	34	8	4	8	0	21	0.63
17a	6	25	131	17	8	0	0	25	0.19
17b/17c	8	34	187	21	4	0	0	25	0.14
22	3	13	81	13	13	0	4	30	0.37
23	0	0	--	--	--	--	--	--	--
24	0	0	--	--	--	--	--	--	--
25a/25b	2	8	30	13	4	0	0	17	0.57
25c/26	5	21	386	59	85	8	8	161	0.42
27	2	8	21	0	0	0	0	0	0.00
28/29	2	8	127	4	0	0	0	4	0.03
Unknown	3	13	102	47	8	0	4	59	0.58
Total*	73	309	3,629	788	483	178	106	1,556	0.43

*Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

88 survey responses; 373 permits sold; projection factor 4.239

15 (17%) permit holders did not pursue; 29 (40%) pursued in more than one unit

Table 12. Statewide black bear pursuit statistics, fall 2004.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield			Number of Bears Treed				Bears Treed per Pursuit-day
			8/28 to 10/2	11/1 to 11/27	Total	Males	Females	Cubs	Unknown	
2/3/4/5	2	8	39	16	55	0	0	0	0	0.00
6/7/8a	1	4	31	0	31	12	8	12	4	1.13
8b	7	27	130	16	145	47	27	27	8	0.76
9a	4	16	75	0	75	31	8	8	4	0.68
9b/9c/9d	16	63	703	90	793	181	161	98	27	0.59
10	1	4	20	0	20	8	4	0	0	0.60
11a/11b	5	20	126	8	133	59	8	12	12	0.68
13a/13b	1	4	31	8	39	4	4	8	0	0.40
14	2	8	0	12	12	4	0	0	0	0.33
16a	1	4	47	0	47	0	0	0	16	0.33
16b	3	12	39	8	47	4	0	0	0	0.08
16c	4	16	118	20	137	4	20	27	4	0.40
17a	6	24	82	8	90	4	12	12	4	0.35
17b/17c	4	16	47	16	63	12	0	0	4	0.25
22	4	16	55	12	67	12	12	12	0	0.53
23	0	0	--	--	--	--	--	--	--	--
24	1	4	16	39	55	0	0	0	0	0.00
25a/25b	3	12	75	27	102	4	4	0	0	0.08
25c/26	21	82	640	130	769	94	114	20	63	0.38
27	1	4	39	0	39	0	0	0	0	0.00
28/29	2	8	16	20	35	0	0	0	0	0.00
Total*	54	212	2,328	428	2,756	479	381	236	145	0.45

*Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

95 survey responses; 373 permits sold; projection factor 3.926

41 (43%) permit holders did not pursue; 23 (43%) pursued in more than one unit

19 (35%) pursued 8/28 to 10/2 and 11/1 to 11/27; 35 (65%) pursued only 8/28 to 10/2

Table 13. Statewide black bear pursuit statistics, spring 2005.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield	Number of Bears Treed					Bears Treed per Pursuit-day
				Males	Females	Cubs	Unknown	Total	
2/3/4/5	5	12	85	5	0	0	22	27	0.32
6/7/8a	1	2	30	0	0	0	0	0	0.00
8b	5	12	199	27	10	15	32	84	0.42
9a	0	0	--	--	--	--	--	--	--
9b/9c/9d	6	15	55	7	0	0	0	7	0.13
10	29	72	667	212	125	5	25	367	0.55
11a/11b	15	37	271	25	7	0	2	34	0.13
13a/13b	32	80	670	159	142	87	50	438	0.65
14	5	12	70	12	7	0	5	24	0.34
16a	2	5	27	0	0	0	0	0	0.00
16b	11	27	149	0	0	0	5	5	0.03
16c	8	20	179	35	5	5	5	50	0.28
17a	8	20	117	10	5	2	0	17	0.15
17b/17c	10	25	159	10	0	2	0	12	0.08
22	4	10	47	10	7	0	0	17	0.36
23	0	0	--	--	--	--	--	--	--
24	0	0	--	--	--	--	--	--	--
25a/25b	2	5	12	2	0	0	0	2	0.17
25c/26	7	17	97	20	15	0	5	40	0.41
27	0	0	--	--	--	--	--	--	--
28/29	0	0	--	--	--	--	--	--	--
Unknown	13	32	253	116	21	0	11	148	0.58
Total*	103	256	3,087	650	344	116	162	1,272	0.41

*Total pursuers afield and total sample size is not the sum of the column because many pursuers pursued in more than one unit.

110 survey responses; 274 permits sold; projection factor 2.49

7 (6.4%) did not pursue; 33 (33%) pursued in more than one unit

Table 14. Summary of black bear pursuit statistics, fall 2005.

Hunt Unit	Sample Size	Pursuers Afield	Pursuit Days Afield			Number of Bears Treed				Bears Treed per Pursuit-day	
			8/27 to 10/1	11/1 to 11/26	Total	Males	Females	Cubs	Unknown		
2/3/4/5	4	8	69	12	81	35	16	0	14	65	0.80
6/7/8a	5	10	63	12	75	10	4	0	2	16	0.21
8b	13	26	194	94	288	29	29	6	2	66	0.23
9a	8	16	120	4	124	14	2	6	2	24	0.19
9b/9c/9d	28	55	487	26	513	102	122	10	2	236	0.46
10	33	65	536	77	613	77	133	16	8	234	0.38
11a/11b*	6	12	96	6	102	18	14	2	0	34	0.33
13a/13b*	5	10	49	39	88	6	2	0	0	8	0.09
14	24	47	302	86	388	67	69	37	61	234	0.60
16a	9	18	88	43	131	2	4	4	0	10	0.08
16b	9	18	67	0	67	4	10	2	0	16	0.24
16c	13	26	151	31	182	33	14	8	0	55	0.30
17a*	8	16	69	45	114	8	18	6	4	36	0.32
17b/17c*	1	2	12	0	12	0	0	0	0	0	0.00
22	5	10	24	24	48	4	2	0	0	6	0.13
23	2	4	8	4	12	0	0	2	0	2	0.17
24	0	0	--	--	--	-	--	--	--	--	--
25a/25b	9	18	141	10	151	20	2	2	0	24	0.16
25c/26	28	55	471	88	559	35	41	37	4	117	0.21
27	3	6	6	22	28	0	0	0	0	0	0.00
28/29	7	14	45	10	55	2	0	0	2	4	0.07
Total**	220	436	2,998	633	3,631	466	482	138	101	1,187	0.33

*Spring units were closed to fall bear pursuit, though some pursuers indicated that they did pursue in these areas.

**Total pursuers afield and total sample size are not the sum of the columns because many pursuers pursued in more than one unit.

211 survey responses; 414 permits sold; projection factor 1.962

65 (31%) permit holders did not pursue; 27 (19%) pursued in more than one unit during the first half of the season

44 (30%) pursued 8/27 to 10/1 and 11/1 to 11/26; 97 (66%) pursued only 8/27 to 10/1

Survival

Table 15. Adult black bear survival estimated with Chapman-Robson estimator, 1997 through 2005.

Year	Adult Survival	95% Confidence Interval	? [?]
1997	77.6%	75.3%<ss>79.4%	8.19; 8 df
1998	78.3%	77.2%<ss>79.4%	3.34; 8 df
1999	82.0%	77.7%<ss>86.2%	8.81; 8 df
2000	81.9%	77.8%<ss>86.0%	8.97; 8 df
2001	81.5%	78.2%<ss>84.8%	
2002	81.1%	78.2%<ss>84.1%	
2003	83.6%	80.0%<ss>87.2%	
2004	82.4%	79.5%<ss>85.4%	
2005	83.9%		

Method of Take

Table 16. Black Bear harvest by method of take, 2001 through 2005.

Year	Method of Take					Percent Archery	Percent Hunters Using a Guide	
	Bait	Dogs	Calls	Stalk	Unknown			
2001	4	44	1	3	13	65	12%	43%
2002	7	59	0	1	16	83	18%	33%
2003	10	57	0	0	19	86	24%	38%
2004	18	70	2	8	9	107	31%	36%
2005	6	66	1	2	4	79	25%	28%

Age and Sex Ratio

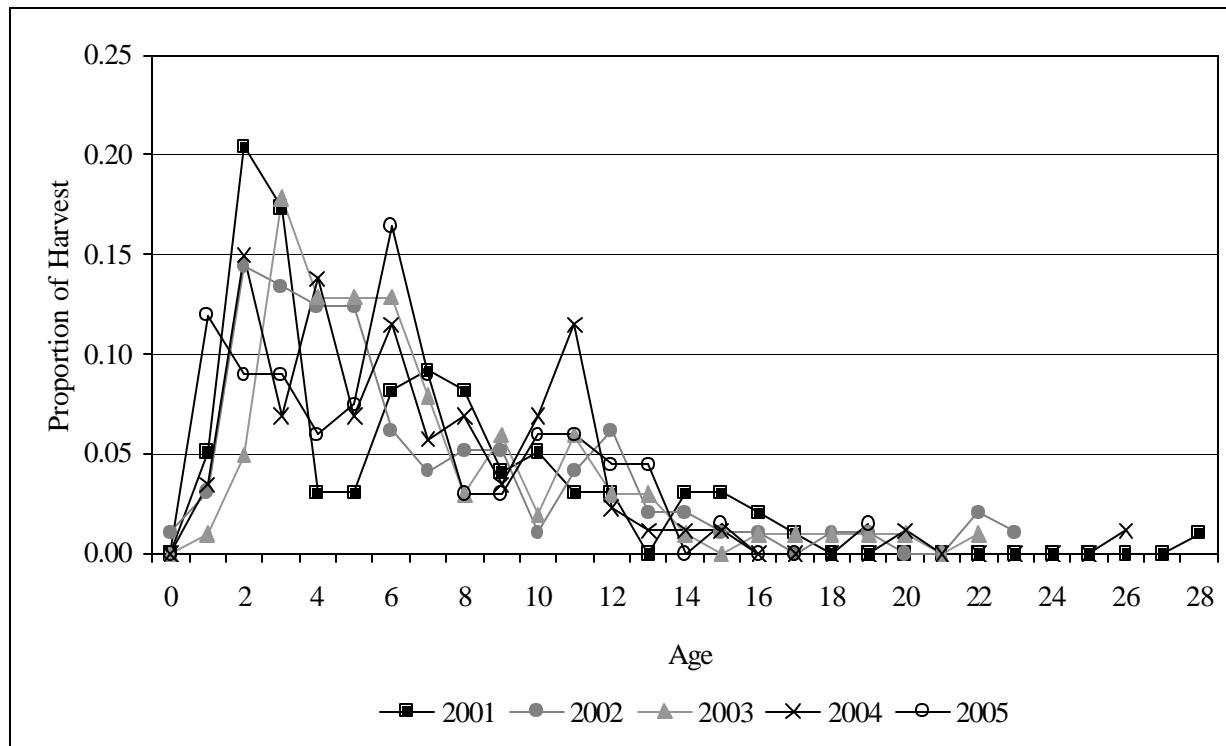


Figure 3. Age structure of black bear sport harvest in Utah, 2001 through 2005.



Figure 4. Sex ratio of black bear sport harvest in Utah, 1975 through 2005.

Livestock Depredation

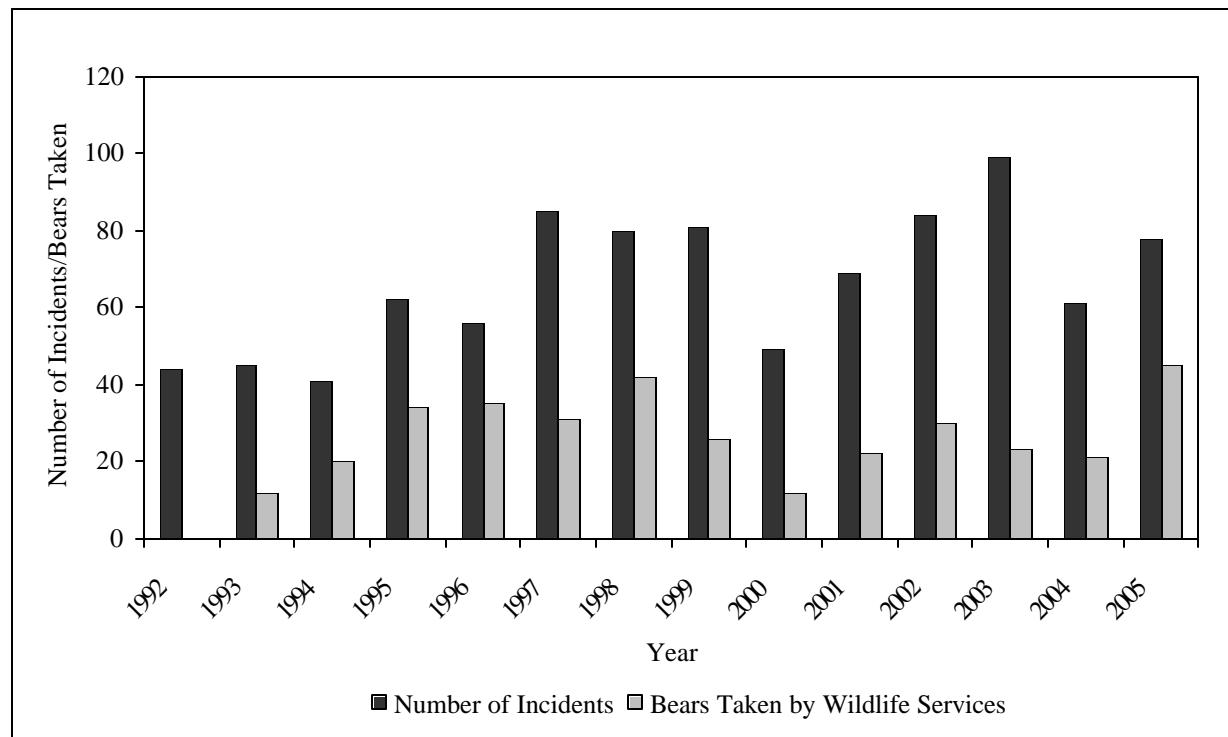


Figure 5. Number of livestock depredation incidents and bears taken by Wildlife Services, 1992 through 2005.

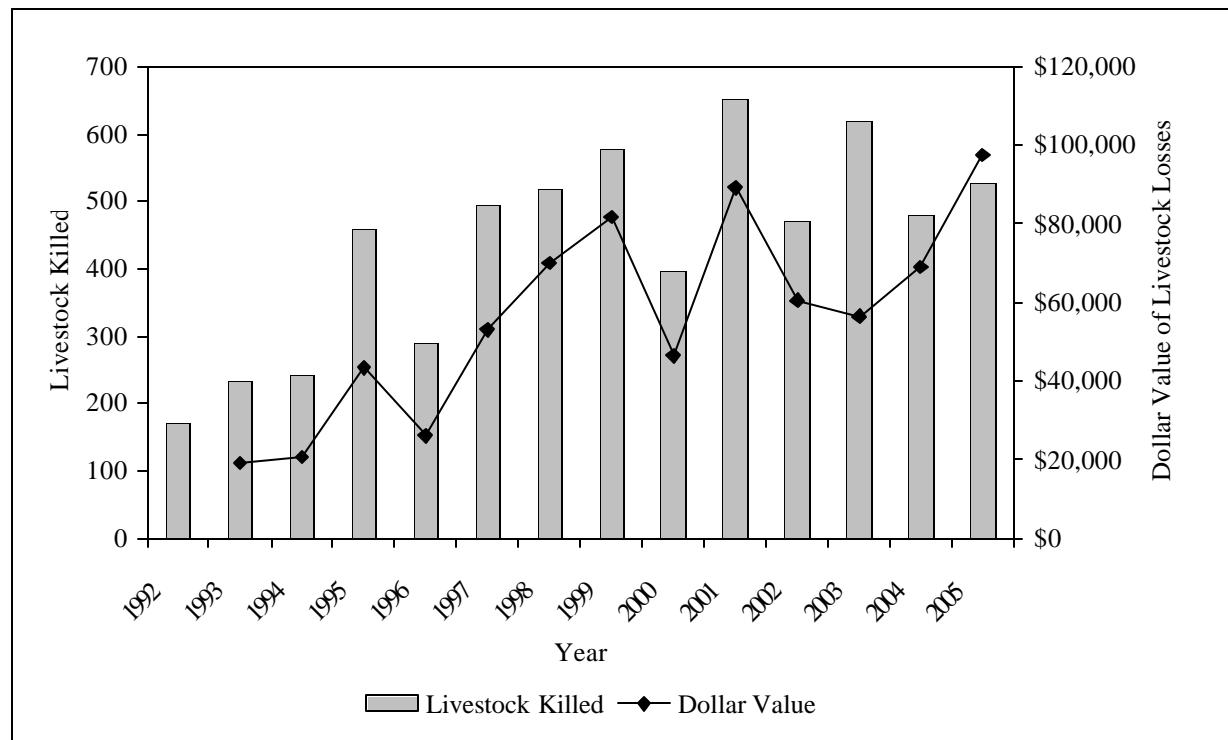


Figure 6. Livestock losses due to black bear depredation, 1992 through 2005.

APPENDIX A

Statewide Black Bear Harvest Summary

Statewide Black Bear harvest summary, 1990-2005.

Permits Year Issued*	Sport Harvest						De predation/Other Mortality**						Total Harvest + Mortality Males Females	Percent Females	Average Age			
	Adult		Sub-adult		Total		Permits Filled		Females		Adult Survival							
	Males	Females	Males	Females	Unknown	Harvest	Percent	Average Age	Males	Females	Unknown	Mortality						
1990	142	15	4	3	0	0	22	15%	18%		20	5	0	25	47	19%		
1991	142	23	4	4	4	0	35	25%	23%		12	7	0	19	54	28%		
1992	142	21	5	5	1	0	32	23%	19%		20	14	0	34	66	30%		
1993	162	14	17	3	1	0	35	22%	51%		11	3	0	14	49	43%		
1994	168	22	9	3	8	0	42	25%	40%		16	9	0	25	67	39%		
1995	175	30	16	5	2	0	53	30%	34%		30	15	0	45	98	34%		
1996	181	32	23	7	6	0	68	38%	43%	0.781	40	6	0	46	114	31%		
1997	192	25	20	3	2	0	50	26%	44%	0.776	26	5	0	31	81	33%		
1998	202	20	15	6	4	1	46	23%	41%	0.783	24	9	9	42	88	32%		
1999	222	33	11	7	6	0	57	26%	30%	0.820	18	11	6	35	92	30%		
2000	214	35	23	10	7	0	75	35%	40%	0.819	62	6	4	72	147	24%		
2001	214	40	24	1	1	2	68	32%	37%	6.9	0.788	37	21	2	60	128	36%	
2002	232	53	25	1	2	3	84	36%	32%	6.8	0.831	41	27	8	76	160	34%	
2003	226	56	20	1	5	3	85	38%	29%	7.4	0.829	18	8	3	29	114	29%	
2004	240	82	22	3	0	0	107	45%	21%	6.6	0.824	29	20	1	50	157	27%	
2005	252	58	17	0	1	0	79	31%	23%	6.6	0.839	15	15	3	33	112	29%	
Total	3,106	559	255	62	50	9	938	29.3%	32.8%	6.9	0.809	419	181	36	636	1,574		
Average	194.1	34.9	15.9	3.9	3.1	0.6	58.6					26.2	11.3	2.3	39.8	98.4	31.1%	
																5.9		

*Permits issued since 2001 includes all permit types.

**Other mortality may include highway mortality, poaching, Wildlife Services mortality, and UDWR nuisance mortality.

APPENDIX B

Black Bear Harvest Summary by Hunt Unit

Units 2, 3, 4, 5 - Cache, Ogden, Morgan/Rich, East Canyon*

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Total Harvest	Percent Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Unkown	Males	Females	Unkown											
1990	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1991	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1992	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1993	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1994	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1995	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1996	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1997	1	0	0	0	0	0	0	0%	0%	0%	0%	1	0	0	1	1	1	0%
1998	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	1	1	1	0%
1999	1	0	0	0	0	0	0	0%	0%	0%	0%	1	0	0	1	1	1	0%
2000	1	1	0	0	0	0	1	100%	100%	0%	0%	0	0	0	0	0	1	0%
2001	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
2002	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
2003**	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
2004	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
2005	1	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
Total	16	1	0	0	0	0	1					2	0	1	3	4		
Average	1.0	0.1	0.0	0.0	0.0	0.0	0.1	6.3%	0.0%	0.1	0.0	0.1	0.2	0.3	0%	3.0		

*Unit 5 was added to units 2, 3, and 4 in 2004.

**Unit 2 was pursuit only in 2003.

Units 6, 7, 8a - Chalk Creek, Kamas, North Slope/Summit

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total			
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females										
1990	3	0	0	0	0	0	0	0%	0%	0%	0	0	0	0	0	0	0
1991	3	0	0	0	0	0	0	0%	33%	0%	1	0	0	0	1	1	0%
1992	3	1	0	0	0	0	0	1	0%	0%	0	0	0	0	1	1	0%
1993	3	0	0	0	0	0	0	0%	0%	0%	3	0	0	0	3	3	0%
1994	3	0	0	0	0	0	0	0%	0%	0%	0	1	0	1	1	1	100%
1995	3	0	0	0	0	0	0	0%	0%	0%	4	0	0	4	4	4	0%
1996	2	0	0	0	0	0	0	0%	0%	0%	0	0	0	0	0	0	0
1997	2	1	0	0	0	0	0	1	50%	0%	3	0	0	3	4	4	0%
1998	2	0	0	0	1	0	0	1	50%	100%	4	1	0	5	6	6	5.7
1999	2	0	0	0	0	0	0	0%	0%	0%	3	1	0	4	4	4	25%
2000	2	0	0	0	0	1	0	1	50%	100%	3	0	0	3	4	4	25%
2001	2	0	0	0	0	0	0	0%	0%	0%	6	7	0	13	13	13	3.6
2002	2	0	0	0	0	0	0	0%	0%	0%	6	1	0	7	7	7	14%
2003	2	0	0	0	0	0	0	0%	0%	0%	2	1	0	3	3	3	33%
2004	5	1	0	0	0	0	1	20%	0%	2.0	0	2	0	2	3	3	67%
2005	5	2	1	0	0	0	0	3	60%	33%	3.0	2	1	2	5	8	25%
Total	44	5	1	0	2	0	8				37	15	2	54	62		
Average	2.8	0.3	0.1	0.0	0.1	0.0	0.5	16.5%	38.9%	2.5	2.3	0.9	0.1	3.4	3.9	27%	3.9

Unit 8b - North Slope, Daggett

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total			
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females										
1998	4	0	0	0	0	0	0	0%	25%	0%	0	0	0	0	0	0	0%
1999	4	1	0	0	0	0	1	0%	0%	1.0	0	0	0	0	1	1	1.0
2000	4	0	0	0	0	0	0	0%	0%	0%	2	0	0	2	2	2	0%
2001	4	0	0	0	0	0	0	0%	0%	0%	1	0	0	1	1	1	0%
2002	4	0	0	0	0	0	0	0%	25%	0%	2	2	0	4	4	4	50%
2003	4	1	0	0	0	0	1	0%	25%	7.0	0	0	0	0	1	1	7.0
2004	4	0	0	0	0	0	0	0%	50%	12.0	1	0	0	1	1	1	2.0
Total	32	3	1	0	0	0	4				6	2	0	8	12	12	12.0
Average	4.0	0.4	0.1	0.0	0.0	0.0	0.5	12.5%	16.7%	6.7	0.8	0.3	0.0	1.0	1.5	14%	5.0

Unit 9a - South Slope, Yellowstone

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total Mortality	Percent Harvest +	Average Females	Total	
		Adult		Sub-adult		Total	Permits Filled	Percent Filled	Average Females	Males	Females	Unknown	Mortality					
		Males	Females	Males	Females	Unknown	Harvest											
2002	6	1	1	0	0	1	3	50%	33%	6.7	0	0	0	0	3	33%	6.7	
2003	7	0	2	0	0	0	2	29%	100%	11.0	0	0	0	0	2	100%	11.0	
2004	6	2	2	0	0	0	4	67%	50%	11.8	1	1	0	2	6	50%	11.8	
2005	12	4	1	0	0	0	5	42%	20%	4.8	0	1	0	1	6	33%	6.0	
Total	31	7	6	0	0	1	14				1	2	0	0	3	17		
Average	7.8	1.8	1.5	0.0	0.0	0.3	3.5	46.7%	50.8%	8.5	0.3	0.5	0.0	0.8	4.3	54%	8.9	

Units 9b, 9c, 9d - South Slope, Vernal, Diamond Mountain, Bonanza

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total Mortality	Percent Harvest +	Average Females	Total
		Adult		Sub-adult		Total	Permits Filled	Percent Filled	Average Females	Males	Females	Unknown	Mortality				
		Males	Females	Males	Females	Unknown	Harvest										
2002	10	0	2	0	0	1	3	30%	67%	2.7	2	1	0	3	6	50%	2.5
2003	9	2	2	0	0	0	4	44%	50%	7.3	0	1	1	2	6	50%	8.2
2004	9	2	2	2	0	0	6	67%	33%	3.3	0	1	0	1	7	43%	3.3
2005	11	6	1	0	0	0	7	64%	14%	7.4	0	0	0	0	7	14%	7.4
Total	39	10	7	2	0	1	20				2	3	1	6	26		
Average	9.8	2.5	1.8	0.5	0.0	0.3	5.0	51.2%	41.1%	5.1	0.5	0.8	0.3	1.5	6.5	39%	5.3

Unit 9 - South Slope

Year	Permits Issued	Sport Harvest						Predation/Other Harvest						Total Mortality	Harvest + Mortality	Percent Females	Average Females	Total Age
		Adult		Sub-adult		Total	Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Total Mortality					
		Males	Females	Males	Females	Unknown	Harvest											
1990	16	2	1	0	0	0	3	19%	33%	1	2	0	3	6	6	50%		
1991	16	2	0	2	0	0	4	25%	0%	1	1	0	2	6	6	17%		
1992	16	1	0	1	1	0	3	19%	33%	4	2	0	6	9	9	33%		
1993	16	3	1	1	0	0	5	31%	20%	1	0	0	1	6	6	17%		
1994	16	3	0	0	1	0	4	25%	25%	1	0	0	1	5	5	20%		
1995	16	3	2	0	0	0	5	31%	40%	6	1	0	7	12	12	25%		
1996	17	2	0	1	0	0	3	18%	0%	4	2	0	6	9	9	22%		
1997	18	1	1	0	0	0	2	11%	50%	3	0	0	3	5	5	20%		
1998	14	1	2	0	0	0	3	21%	67%	3	2	3	8	11	11	36%	11.7	
1999	14	5	0	0	1	0	6	43%	17%	2	1	0	3	9	9	22%	8.5	
2000	14	4	1	0	0	0	5	36%	20%	3	0	0	3	8	8	13%	7.8	
2001	14	2	2	0	0	0	4	29%	50%	6	5	1	12	16	16	44%	5.4	
Total	187	29	10	5	3	0	47							55	55		102	
Average	15.6	2.4	0.8	0.4	0.3	0.0	3.9	25.6%	29.6%	2.6	2.9	1.3	0.3	4.6	8.5	27%	8.4	

Unit 10 - Book Cliffs

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	
		Males	Females	Males	Females	Males	Females											
1990	18	1	2	0	0	0	0	3	17%	6.7%	3	0	0	3	6	33%	33%	
1991	18	5	1	0	1	0	0	7	39%	29%	0	0	0	0	7	7	29%	
1992	18	5	1	0	0	0	0	6	33%	17%	2	0	0	2	8	8	13%	
1993	18	3	4	0	0	0	0	7	39%	57%	0	0	0	0	7	7	57%	
1994	18	3	3	1	1	0	0	8	44%	50%	1	0	0	1	9	9	44%	
1995	18	11	1	0	0	0	0	12	67%	8%	2	0	0	2	14	14	7%	
1996	18	5	2	3	0	0	0	10	56%	20%	1	0	0	1	11	11	18%	
1997	18	5	3	0	0	0	0	8	44%	38%	0	0	0	0	8	8	38%	
1998	30	3	2	0	2	0	0	7	23%	57%	0	0	0	0	7	7	57%	
1999	30	9	0	0	1	0	0	10	33%	10%	1	1	0	2	12	12	17%	
2000	29	4	6	3	1	0	0	14	48%	50%	9	3	0	12	26	26	38%	
2001	15	4	3	1	0	0	0	8	53%	38%	6.8	1	0	1	9	9	33%	6.8
2002	25	7	5	0	0	0	0	12	48%	42%	7.3	1	0	1	2	14	14	36%
2003	25	3	3	1	0	2	0	9	36%	33%	8.0	2	0	1	3	12	12	25%
2004	24	10	3	0	0	0	0	13	54%	23%	5.9	2	2	0	4	17	17	29%
2005	29	5	2	0	1	0	0	8	28%	38%	6.5	0	0	0	8	8	8	38%
Total	351	83	41	9	7	2	142				25	6	2	33	175			
Average	21.9	5.2	2.6	0.6	0.4	0.1	8.9	41.4%	35.9%	6.9	1.6	0.4	0.1	2.1	10.9	32%	6.6	

Units 11a, 11b - Nine Mile Anthro-Range Creek

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total Mortality	Harvest + Mortality	Percent Females	Average Age	Total					
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown										
		Males	Females	Males	Females	Males	Females																
1990	44	12	0	2	0	0	0	14	32%	0%	6	0	0	6	20	0%	0%	0%					
1991	22	2	0	1	2	0	0	5	23%	40%	1	1	0	2	7	43%							
1992	22	5	0	1	0	0	0	6	27%	0%	4	1	0	5	11	9%							
1993	27	0	3	0	1	0	0	4	15%	100%	0	0	0	0	4	100%							
1994	27	1	3	2	4	0	0	10	37%	70%	4	2	0	6	16	56%							
1995	24	2	3	1	1	0	0	7	29%	57%	3	3	0	6	13	54%							
1996	24	4	3	2	3	0	0	12	50%	50%	5	2	0	7	19	42%							
1997	20	2	2	0	0	0	0	4	20%	50%	1	0	0	1	5	40%							
1998	20	3	1	1	0	0	0	5	25%	20%	0	0	0	0	5	20%							
1999	20	2	0	0	1	0	0	3	15%	33%	0	0	0	0	3	33%							
2000	20	3	2	1	2	0	0	8	40%	50%	9	0	0	9	17	24%							
2001	15	3	0	0	0	0	0	3	20%	0%	8.3	1	0	1	4	0%	7.8						
2002	20	7	0	0	0	0	0	7	35%	0%	5.0	2	3	0	5	12	25%	5.0					
2003	20	7	2	0	0	0	0	9	45%	22%	12.0	0	0	0	0	9	22%	12.0					
2004	19	9	2	0	0	0	0	11	58%	18%	7.6	4	4	0	8	19	32%	8.7					
2005	19	2	0	0	0	0	0	2	11%	0%	6.5	0	0	0	2	0%	0%	6.5					
Total	363	64	21	11	14	0	110				40	16	0	56	166								
Average	22.7	4.0	1.3	0.7	0.9	0.0	6.9	30.1%	31.9%	7.9	2.5	1.0	0.0	3.5	10.4	31%	6.8						

Units 13a, 13b - La Sal, La Sal Mountains-Dolores Triangle

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total		
		Adult			Sub-adult			Permits Filled	Percent Harvest	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females									
1990	10	1	0	0	0	0	0	1	10%	0%	2	0	0	2	3	0%
1991	10	5	1	1	0	0	0	7	70%	14%	1	0	0	1	8	13%
1992	10	1	1	0	0	0	0	2	20%	50%	1	0	0	1	3	33%
1993	12	3	1	1	0	0	0	5	42%	20%	0	0	0	0	5	20%
1994	12	8	0	0	0	0	0	8	67%	0%	0	0	0	0	8	0%
1995	12	2	3	1	0	0	0	6	50%	50%	0	0	0	0	6	50%
1996	16	6	5	0	0	0	0	11	69%	45%	2	0	0	2	13	38%
1997	20	4	7	2	1	0	0	14	70%	57%	6	0	0	6	20	40%
1998	20	5	4	1	1	0	0	11	55%	45%	0	0	1	1	12	42%
1999	20	3	2	2	2	0	0	9	45%	44%	0	0	0	0	9	44%
2000	19	4	6	0	0	0	0	10	53%	60%	2	0	0	2	12	50%
2001	30	13	3	0	0	0	0	16	53%	19%	8.1	2	0	2	18	17%
2002	30	17	4	0	0	0	0	21	70%	19%	6.9	3	0	0	3	7.0
2003	30	13	3	0	2	0	0	18	60%	28%	9.0	1	0	0	1	24
2004	28	12	3	0	0	0	0	15	54%	20%	7.9	0	1	1	16	25%
2005	28	8	2	0	0	0	0	10	36%	20%	7.1	0	3	0	13	38%
Total	307	105	45	8	6	0	164				20	4	1	25	189	
Average	19.2	6.6	2.8	0.5	0.4	0.0	10.3	51.4%	30.8%	7.8	1.3	0.3	0.1	1.6	11.8	28%
															6.9	

Unit 14 - San Juan

Unit 16a - Central Mountains, Manti/Nebo

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Permits Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females											
1990	3	0	0	0	0	0	0	0%	0%	0%	0%	2	0	0	2	2	0%	
1991	3	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1992	3	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1993	6	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1994	6	0	0	0	0	0	0	0%	0%	0%	0%	1	0	0	1	1	0%	
1995	6	0	0	0	0	0	0	0%	0%	0%	0%	3	0	0	3	3	0%	
1996	6	0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0	0	0	0
1997	6	0	0	0	0	0	0	0%	0%	0%	0%	1	0	0	1	1	0%	
1998	6	0	0	1	0	0	0	1	17%	0%	0%	0	0	0	0	1	0%	1.0
1999	6	1	1	0	0	0	0	2	33%	50%	0	0	0	0	0	2	50%	6.0
2000	6	2	1	0	0	0	0	3	50%	33%	1	0	0	0	1	4	25%	4.5
2001	6	0	1	0	0	1	2	33%	50%	2.5	0	0	0	0	0	2	50%	2.5
2002	6	1	1	1	0	0	0	3	50%	33%	6.0	1	0	1	2	5	20%	7.5
2003	8	3	0	0	0	0	0	3	38%	0%	3.0	1	0	0	1	4	0%	3.0
2004	8	2	1	0	0	0	0	3	38%	33%	3.5	1	0	0	1	4	25%	5.3
2005	8	5	0	0	0	0	0	5	63%	0%	2.0	0	1	0	1	6	17%	2.0
Total	93	14	5	2	0	1	22					11	1	1	13	35		
Average	5.8	0.9	0.3	0.1	0.0	0.1	1.4	20.1%	25.0%	3.4	0.7	0.1	0.1	0.8	2.2	16%	4.0	

Unit 16b - Central Mountains, Manti-North

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Permits Filled	Percent Filled	Average Females	Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females											
1990	16	1	0	0	0	0	1	6%	0%	3	1	0	4		5	20%		
1991	16	2	0	0	0	0	2	13%	0%	2	2	0	4		6	33%		
1992	16	2	0	0	0	0	2	13%	0%	4	7	0	11		13	54%		
1993	20	0	2	0	0	0	2	100%		1	1	0	2		4	75%		
1994	22	0	0	0	0	0	0	0%		1	0	0	1		1	1	0%	
1995	22	1	0	1	0	0	2	9%	0%	1	3	0	4		6	50%		
1996	21	1	2	0	0	0	3	14%	67%	6	0	0	6		9	22%		
1997	21	2	1	0	1	0	4	19%	50%	5	3	0	8		12	42%		
1998	20	0	1	0	0	0	1	5%	100%	4	0	1	5		6	17%	3.8	
1999	25	2	2	1	1	0	6	24%	50%	2	5	0	7		13	62%	4.7	
2000	25	1	1	0	2	0	4	16%	75%	3	0	0	3		7	43%	4.3	
2001	22	1	4	0	1	0	6	27%	83%	3.5	5	0	5		11	45%	2.9	
2002	16	1	2	0	1	1	5	31%	60%	10.0	1	1	2		4	9	44%	10.0
2003	16	0	1	0	0	0	1	6%	100%	5.0	2	0	2		3	33%	4.5	
2004	15	4	1	0	0	0	5	33%	20%	3.0	6	1	0		12	17%	3.7	
2005	15	7	0	0	0	0	7	47%	0%	4.5	1	1	0		9	11%	4.5	
Total	308	25	17	2	6	1	51			47	25	3	75		126			
Average	19.3	1.6	1.1	0.1	0.4	0.1	3.2	17.1%	47.0%	5.2	2.9	1.6	0.2		7.9	36%	4.8	

Unit 16c - Central Mountains, Manti-South

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	
		Males	Females	Males	Females	Males	Females											
1990	17	1	0	1	0	0	0	2	12%	0%	0	0	0	0	0	2	0%	
1991	17	1	2	0	0	0	0	3	18%	67%	0	0	0	0	0	3	67%	
1992	17	2	1	2	0	0	0	5	29%	20%	1	1	0	2	7	7	29%	
1993	18	2	2	0	0	0	0	4	22%	50%	0	0	0	0	0	4	50%	
1994	20	0	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	
1995	20	0	0	1	0	0	0	1	5%	0%	0	1	0	1	2	2	50%	
1996	20	2	1	0	1	0	0	4	20%	50%	1	0	0	0	1	5	40%	
1997	20	1	1	0	0	0	0	2	10%	50%	1	1	0	2	4	4	50%	
1998	16	2	0	1	0	0	0	3	19%	0%	1	3	0	4	7	7	43%	
1999	20	0	0	1	0	0	0	1	5%	0%	1	1	0	2	3	33%	4.3	
2000	20	2	1	0	0	0	0	3	15%	33%	10	2	0	12	15	20%	1.7	
2001	18	2	1	0	0	0	0	3	17%	33%	5.0	6	2	0	8	11	27%	5.2
2002	12	1	0	0	0	0	0	1	8%	0%	3.0	2	2	0	4	5	40%	3.0
2003	12	3	0	0	0	0	0	3	25%	0%	7.3	0	1	1	2	5	20%	6.0
2004	11	2	1	1	0	0	0	4	36%	25%	3.0	3	2	0	5	9	33%	5.2
2005	10	4	0	0	0	0	0	4	40%	0%	2.7	1	1	0	2	6	17%	3.5
Total	268	25	10	7	1	0	43				27	17	1	45	88			
Average	16.8	1.6	0.6	0.4	0.1	0.0	2.7	17.6%	21.9%	4.2	1.7	1.1	0.1	2.8	5.5	35%	4.6	

Unit 17a - Wasatch Mountains, West

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	
		Males	Females	Males	Females	Males	Females											
2001	20	1	0	0	0	0	0	1	5%	0%	12.0	3	2	0	5	6	33%	5.7
2002	20	4	2	0	0	0	0	6	30%	33%	8.2	7	9	2	18	24	46%	6.5
2003	20	4	2	0	3	1	10	50%	50%	4	0	0	0	4	14	36%	5.5	
2004	19	5	0	0	0	0	5	26%	0%	5.0	2	2	0	4	9	22%	4.1	
2005	18	3	1	0	0	0	4	22%	25%	5.3	5	2	0	7	11	27%	5.3	
Total	97	17	5	0	3	1	26				21	15	2	38	64			
Average	19.4	3.4	1.0	0.0	0.6	0.2	5.2	26.7%	21.7%	7.6	4.2	3.0	0.4	7.6	12.8	33%	5.4	

Units 17b, 17c - Wasatch Mountains, Currant Creek-Avintaquin

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total					
		Adult			Sub-adult			Total	Permits Filled	Percent	Average	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	Total
		Males	Females	Age	Males	Females	Age					Age	Age	Age	Age	Age			
2001	14	0	0	0	0	0	0	0%	0%	0%	3.0	3	6	2	11	13	46%	6.6	
2002	14	2	0	0	0	0	0	2	14%	0%	4	2	0	0	6	8	25%	5.2	
2003	14	2	0	0	0	0	0	2	14%	0%	3.6	3	2	0	5	13	31%	2.5	
2004	13	6	2	0	0	0	0	8	62%	25%	2.6	3	2	0	5	3	33%	2.0	
2005	13	1	0	0	0	0	0	1	8%	0%	2.0	1	1	0	2	3	33%	2.0	
Total	68	11	2	0	0	0	0	13				11	11	2	24	37			
Average	13.6	2.2	0.4	0.0	0.0	0.0	0.0	2.6	19.6%	6.3%	2.5	2.2	2.2	0.4	4.8	7.4	34%	4.1	

Unit 17 - Wasatch Mountains

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total					
		Adult			Sub-adult			Total	Permits Filled	Percent	Average	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	Total
		Males	Females	Age	Males	Females	Age												
1990	26	6	0	1	0	0	0	7	27%	0%	6	4	0	0	10	17	24%		
1991	11	1	0	0	0	0	0	1	9%	0%	2	0	0	0	2	3	0%		
1992	11	1	0	0	1	0	0	2	18%	50%	0	0	0	0	0	2	50%		
1993	14	0	2	1	0	0	0	3	21%	67%	1	1	0	0	2	5	60%		
1994	14	1	1	1	0	0	0	3	21%	33%	0	2	0	0	2	5	60%		
1995	14	2	0	0	0	0	0	2	14%	0%	3	2	0	0	5	7	29%		
1996	14	2	2	0	1	0	5	5	36%	60%	9	0	0	0	9	14	21%		
1997	10	1	1	0	0	0	0	2	20%	50%	2	0	0	0	2	4	25%		
1998	26	0	1	0	0	0	0	1	4%	100%	9	1	4	14	15	13%		2.6	
1999	35	5	2	0	0	0	0	7	20%	29%	5	2	6	13	20	20%		3.9	
2000	34	3	2	1	0	0	0	6	18%	33%	17	0	0	0	17	23	9%		4.5
Total	209	22	11	4	2	0	0	39			54	12	10	76	115				
Average	19.0	2.0	1.0	0.4	0.2	0.0	0.0	3.5	19.0%	38.4%	4.9	1.1	0.9	6.9	10.5	28%		3.7	

Unit 22 - Beaver

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total				
		Adult			Sub-adult			Total Harvest	Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Males	Females	Males	Females											
1990	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1991	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1992	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1993	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1994	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1995	1	1	0	0	0	0	0	100%	0%			0	0	0	0	1	0%	
1996	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1997	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1998	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
1999	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
2000	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
2001	1	1	0	0	0	0	1	100%	0%	5.0	0	0	0	0	1	0%	5.0	
2002	1	0	0	0	0	0	0	0%				1	2	0	3	3	67%	
2003	1	0	0	0	0	0	0	0%				0	0	0	0	0	0	
2004	1	1	0	0	0	0	1	100%	0%	7.0	0	0	0	0	1	0%	7.0	
2005	1	0	1	0	0	0	1	100%	100%	13.0	0	0	0	0	1	100%	13.0	
Total	16	3	1	0	0	0	4		1			2	0	3	7			
Average	1.0	0.2	0.1	0.0	0.0	0.0	0.3	25.0%	25.0%	8.3	0.1	0.1	0.0	0.2	0.4	33%	8.3	

Unit 23 - Monroe

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total Mortality	Percent Females	Average Age	Total		
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown						
		Males	Females	Males	Females	Males	Females												
1990	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1991	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1992	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1993	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	1	1	0%		
1994	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1995	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1996	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1997	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1998	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
1999	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2000	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2001	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2002	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2003	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2004	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
2005	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0		
Total	16	0	0	0	0	0	0			1	0	0	0	1	1	0.1	0%		
Average	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%	0.1	0.0	0.0	0.1	0.1	1	0.1	0%		

Units 25a, 25b - Plateau, Fish Lake, Thousand Lakes

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total					
		Adult			Sub-adult			Total	Permits Filled	Percent Filled	Average Females	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	Total
		Males	Females	Males	Females	Males	Females												
1990	3	0	0	0	0	0	0	0%			0%	0	0	0	0	0	0	0%	
1991	3	1	0	0	0	0	0	1	33%	0%	0	0	0	0	0	0	1	0%	
1992	3	1	0	0	0	0	0	1	33%	0%	0	0	0	0	0	0	1	1	
1993	3	1	0	0	0	0	0	1	33%	0%	1	0	0	0	1	2	0%	0%	
1994	3	0	0	0	0	1	0	1	33%	100%	2	1	0	0	3	4	50%	4	
1995	4	2	1	0	0	0	0	3	75%	33%	1	1	0	0	2	5	40%	40%	
1996	4	1	2	0	0	0	0	3	75%	67%	0	0	0	0	0	3	3	3	
1997	4	3	0	0	0	0	0	3	75%	0%	0	0	0	0	0	3	0%	0%	
1998	4	1	0	0	0	0	0	1	25%	0%	0	0	0	0	0	1	1	0%	
1999	4	1	0	0	0	0	0	1	25%	0%	0	0	0	0	0	1	1	0%	
2000	4	0	0	0	0	0	0	0	0%		0	0	0	0	0	0	0	0	
2001	4	0	0	0	0	0	0	0	0%		1	1	0	0	2	2	50%	2	
2002	4	0	1	0	0	0	0	1	25%	100%	2.0	0	0	0	0	1	1	100%	2.0
2003	4	3	0	0	0	0	0	3	75%	0%	5.3	1	0	0	1	4	4	0%	4.5
2004	6	0	2	0	0	0	0	2	33%	100%	11.5	0	0	0	0	2	2	100%	11.5
2005	6	2	0	0	0	0	0	2	33%	0%	6.0	1	0	0	1	3	3	0%	6.0
Total	63	16	6	0	1	0	23				7	3	0	10	10	33			
Average	3.9	1.0	0.4	0.0	0.1	0.0	1.4	35.9%	30.8%	6.2	0.4	0.2	0.0	0.6	2.1	28%	4.7		

Units 25c, 26 - Plateau, Boulder/Kaiparowits

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total					
		Adult			Sub-adult			Total	Permits Filled	Percent Filled	Average Females	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age	Total
		Males	Females	Males	Females	Males	Females												
2004	16	6	2	0	0	0	0	8	50%	25%	8.3	2	0	1	3	11	18%	8.4	
2005	16	2	2	0	0	0	0	4	25%	50%	13.0	1	1	1	3	7	43%	9.3	
Total	32	8	4	0	0	0	0	12	3	1	2	6	6	0	6	18			
Average	16.0	4.0	2.0	0.0	0.0	0.0	0.0	6.0	37.5%	37.5%	10.7	1.5	0.5	1.0	3.0	9.0	31%	8.9	

Unit 25c - Plateau/Boulder

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total			
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Sub-adult	Males	Females	Unknown										
1990	3	0	0	0	0	0	0	0%	33%	100%	1	0	0	0	1	1	0%
1991	3	0	0	0	1	0	1	1	33%	0%	0	0	0	0	1	1	100%
1992	3	1	0	0	0	0	0	1	33%	0%	0	0	0	0	1	1	0%
1993	4	2	0	0	0	0	0	2	50%	0%	0	2	0	0	2	4	50%
1994	5	0	1	0	0	0	0	1	20%	100%	2	2	0	0	4	5	60%
1995	6	3	2	0	0	0	0	5	83%	40%	1	0	0	0	1	6	33%
1996	8	2	2	0	0	0	0	4	50%	50%	3	0	0	0	3	7	29%
1997	8	2	1	0	0	0	0	3	38%	33%	0	0	0	0	0	3	33%
1998	8	1	1	0	0	0	0	2	25%	50%	2	0	0	0	2	4	25%
1999	8	1	2	1	0	0	0	4	50%	50%	1	0	0	0	1	5	40%
2000	8	2	1	1	0	0	0	4	50%	25%	0	0	0	0	0	4	25%
2001	8	1	2	0	0	0	0	3	38%	67%	7.6	1	0	1	2	5	40%
2002	8	2	1	0	1	0	0	4	50%	50%	3.0	1	0	0	1	5	40%
2003	8	3	0	0	0	0	0	3	38%	0%	5.0	1	3	0	4	7	43%
Total	88	20	13	2	2	0	37				13	7	1	21	58		
Average	6.3	1.4	0.9	0.1	0.1	0.0	2.6	39.8%	43.5%	5.2	0.9	0.5	0.1	1.5	4.1	37%	5.8

Unit 26 - Kaiparowits

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total			
		Adult			Sub-adult			Permits Filled	Percent Females	Average Age	Males	Females	Unknown	Mortality	Harvest + Mortality	Percent Females	Average Age
		Males	Females	Sub-adult	Males	Females	Unknown										
2000	1	1	0	0	0	0	1	100%	0%	40	0	0	0	0	1	1	0%
2001	1	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0%
2002	1	0	0	0	0	0	0	0%	0%	1	0	0	0	0	1	1	0%
2003	1	0	1	0	0	0	1	100%	100%	13.0	0	0	0	0	1	1	100%
Total	4	1	1	0	0	0	2			1	0	0	0	0	3		
Average	1.0	0.3	0.3	0.0	0.0	0.0	0.5	50.0%	50.0%	8.5	0.3	0.0	0.0	0.0	0.8	33%	13.0

Unit 27 - Paunsaugunt

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total		
		Adult		Sub-adult		Total	Permits Filled	Percent	Average Age	Males	Females	Unknown	Total Mortality	Harvest + Mortality	Percent Females	Total Average Age
		Males	Females	Males	Females	Unknown	Harvest									
2003	1	0	0	0	0	0	0	0%		0	0	0	0	0	0	0
2004	1	0	0	0	0	0	0	0%		0	1	0	1	1	100%	100%
2005	2	1	0	0	0	0	1	50%		0	0	0	0	1	1	0%
Total	4	1	0	0	0	0	1			0	1	0	1	2	2	
Average	1.3	0.3	0.0	0.0	0.0	0.0	0.3	17%	0%	0.0	0.3	0.0	0.3	0.7	50%	

Units 28, 29 - Pangnitch Lake, Zion

Year	Permits Issued	Sport Harvest						Depredation/Other Harvest						Total			
		Adult		Sub-adult		Total	Permits Filled	Percent	Average Age	Males	Females	Unknown	Total Mortality	Harvest + Mortality	Percent Females	Total Average Age	
		Males	Females	Males	Females	Unknown	Harvest										
1990	3	0	0	0	0	0	0	0%		1	0	0	1	1	1	0%	
1991	3	1	0	0	0	0	1	33%	0%	2	0	0	2	2	3	0%	
1992	3	0	0	0	0	0	0	0%		2	0	0	2	2	2	0%	
1993	3	0	0	0	0	0	0	0%		0	0	0	0	0	0	0%	
1994	4	1	0	0	0	0	1	25%	0%	1	0	0	1	1	2	0%	
1995	8	1	0	0	0	0	1	13%	0%	1	1	1	0	2	3	33%	
1996	8	0	0	0	0	0	0	0%		4	0	0	4	4	4	0%	
1997	8	0	0	0	0	0	0	0%		0	0	0	0	0	0	0%	
1998	8	0	0	0	0	0	0	0%		1	0	0	1	1	1	0%	
1999	8	0	1	0	0	0	1	13%	100%	5.7	2	0	2	2	3	33%	
2000	6	0	0	0	0	0	0	0%		0	0	0	0	0	0	0%	
2001	6	0	1	0	0	0	1	17%	100%	19.0	0	1	0	1	2	100%	
2002	6	0	1	0	0	0	1	17%	100%	11.0	4	0	4	5	5	20%	
2003	11	2	1	0	0	0	3	27%	33%	5.3	0	0	0	3	3	33%	
2004	11	2	0	0	0	0	2	18%	0%	8.0	2	0	0	4	4	0%	
2005	11	0	0	0	0	0	0	0%		2	1	0	3	3	33%	4.3	
Total	107	7	4	0	0	0	11			22	3	0	25	36			
Average	6.7	0.4	0.3	0.0	0.0	0.0	0.7	10.1%	41.7%	9.8	1.4	0.2	0.0	1.6	2.3	19%	8.7